

Waterfall Model

1. Requirements analysis and definition:

- Services
 - Class registration for students.
 - Users - students, instructors, administrators.
 - Stores schedules for multiple semesters. (Planning)
 - Stores scheduling preferences.
- Goals
 - student – can register, can see available courses and their own schedule.
 - instructor – can see available courses and their own course roster.
 - admin – can see everything, can edit courses/users/schedules
- Constraints
 - If, many number of students in the system at the same time then system crash.
 - Admin can override the courses for student and instructor. If needed.

2. System software and design:

- User interface (LeopardWeb)- for students to register for classes.
- Interface- Student can select classes to register.
- Backend- Where selected classes are saved.
- Database- Backs the registered classes and the number of credits taken.

3. Implementation and unit testing:

- User interface – student-Can see the classes available and register. Admin- can see everything and can changes accordingly.
- Backend – create user- student, instructor, and admin.
- Database- Backs the registered classes and the number of credits taken.

4. Integration and system testing:

Testing- Select the user, if student register the class, then the registered class should be saved and stored in the student database. For user instructor can see the available courses and their own course roster and for admin can look everything and make some edits and later can be saved and store in student and instructor database.

5. Operation and maintenance: install and use, fix bugs, and update.

- Regular testing and edit code if any bug in the system.